



U.S. Announces New Measures to Expand the Use of Nuclear Power While Reducing the Threat of Nuclear Proliferation

"The world must create a safe, orderly system to field civilian nuclear plants without adding to the danger of weapons proliferation."

President George W. Bush
National Defense University
February 11, 2004

"To build a secure energy future for America, we need to expand production of clean, safe nuclear power."

President George W. Bush
Ronald Reagan Building
June 15, 2005

Global Nuclear Energy Partnership

*Accelerating clean and
safe nuclear energy*

*For more information, visit
www.gnep.energy.gov*



February 6, 2006

Global Nuclear Energy Partnership



*Greater energy
security in a cleaner,
safer world*

The Key Elements of GNEP

Summary

Purpose

As part of President Bush's Advanced Energy Initiative, the Global Nuclear Energy Partnership (GNEP) seeks to develop worldwide consensus on enabling expanded use of economical, carbon-free nuclear energy to meet growing electricity demand. This will use a nuclear fuel cycle that enhances energy security, while promoting non-proliferation. It would achieve its goal by having nations with secure, advanced nuclear capabilities provide fuel services – fresh fuel and recovery of used fuel – to other nations who agree to employ nuclear energy for power generation purposes only. The closed fuel cycle model envisioned by this partnership requires development and deployment of technologies that enable recycling and consumption of long-lived radioactive waste.

The Partnership would demonstrate the critical technologies needed to change the way used nuclear fuel is managed – to build recycling technologies that enhance energy security in a safe and environmentally responsible manner, while simultaneously promoting non-proliferation.

Benefits

- Provide abundant energy without generating carbon emissions or greenhouse gases.
- Recycle used nuclear fuel to minimize waste and reduce proliferation concerns.
- Safely and securely allow developing nations to deploy nuclear power to meet energy needs.
- Assure maximum energy recovery from still-valuable used nuclear fuel.
- Reduce the number of required U.S. geologic waste repositories to one for the remainder of this century.

Expand Domestic Use of Nuclear Power

Build on advances made during the Bush Administration to encourage more nuclear power in the U.S.

Demonstrate More Proliferation-Resistant Recycling

Accelerate the development, demonstration and deployment of new technologies to recycle nuclear fuel that do not result in separated plutonium - a key proliferation risk of existing recycling technologies.

Minimize Nuclear Waste

Significantly reduce the volume of nuclear waste to be disposed of in Yucca Mountain, making disposal less complex and minimizing the need for additional repositories for generations to come.

Develop Advanced Burner Reactors

Demonstrate and deploy Advanced Burner Reactors that use the latest technology to produce energy from recycled nuclear fuel.

Establish Reliable Fuel Services

Establish a consortium of nations with advanced technologies to enable developing nations to acquire nuclear energy economically and while minimizing proliferation risk.

Demonstrate Small-Scale Reactors

Design and deploy small-scale nuclear reactors that are cost-effective, secure and well-suited to conditions in developing nations.

Develop Enhanced Nuclear Safeguards

In order for the International Atomic Energy Agency to effectively and efficiently monitor and verify nuclear materials, design advanced safeguards approaches directly into the planning and building of new, advanced nuclear energy facilities.

